

SPECIFICATION AMENDMENTS

Replace the paragraph at page 1, lines 3-5 with the following paragraph:

This application is a continuation-in-part of U.S. Application Serial No. 10/136,954 filed April 30, 2002 (now U.S. Patent No. 6,716,670), which is a continuation-in-part of U.S. Application Serial No. 10/042,812 filed January 9, 2002, each of which is incorporated by reference.

Replace the paragraph at page 1, lines 6-8 with the following paragraph:

This application is also a continuation-in-part of U.S. Application Serial No. 10/137,494 filed April 30, 2002 (now U.S. Patent No. 6,744,126), which is a continuation-in-part of U.S. Application Serial No. 10/042,812 filed January 9, 2002, each of which is incorporated by reference.

Replace the paragraph at page 41, line 14 to page 42, line 5 with the following paragraph:

The connection joints can be formed from a wide variety of materials including copper, gold, nickel, palladium, tin, alloys thereof, and combinations thereof, can be formed by a wide variety of processes including electroplating, electroless plating, ball bonding, solder reflowing, conductive adhesive curing and welding, and can have a wide variety of shapes and sizes. The shape and composition of the connection joints depends on the composition of the conductive traces as well as design and reliability considerations. Further details regarding an electroplated connection joint are disclosed in U.S. Application Serial No. 09/865,367 filed May 24, 2001 (now U.S. Patent No. 6,562,709) by Charles W.C. Lin entitled "Semiconductor Chip Assembly with Simultaneously Electroplated Contact Terminal and Connection Joint" which is incorporated by reference. Further details regarding an electrolessly plated connection joint are disclosed in U.S. Application Serial No. 09/864,555 filed May 24, 2001 (now U.S. Patent No. 6,660,626) by Charles W.C. Lin entitled "Semiconductor Chip Assembly with Simultaneously Electrolessly Plated Contact Terminal and Connection Joint" which is incorporated by reference. Further details regarding a ball bond connection joint are disclosed in U.S. Application Serial

No. 09/864,773 filed May 24, 2001 (now U.S. Patent No. 6,511,865) by Charles W.C. Lin entitled "Semiconductor Chip Assembly with Ball Bond Connection Joint" which is incorporated by reference. Further details regarding a solder or conductive adhesive connection joint are disclosed in U.S. Application Serial No. 09/927,216 filed August 10, 2001 (now U.S. Patent No. 6,548,393) by Charles W.C. Lin entitled "Semiconductor Chip Assembly with Hardened Connection Joint" which is incorporated by reference. Further details regarding a welded connection joint are disclosed in U.S. Application Serial No. 10/302,642 filed November 23, 2002 (now U.S. Patent No. 6,699,780) by Cheng-Lien Chiang et al. entitled "Method of Connecting a Conductive Trace to a Semiconductor Chip Using Plasma Undercut Etching" which is incorporated by reference.

Replace the paragraph at page 42, lines 6-19 with the following paragraph:

The conductive traces can be formed and attached to the chip by a wide variety of lead-on-chip (LOC) and other connection techniques. See, for instance, U.S. Application Serial No. 09/878,649 filed June 11, 2001 (now U.S. Patent No. 6,544,813) by Charles W.C. Lin entitled "Method of Making a Semiconductor Chip Assembly with a Conductive Trace Subtractively Formed Before and After Chip Attachment," U.S. Application Serial No. 09/878,626 filed June 11, 2001 (now U.S. Patent No. 6,653,217) by Charles W.C. Lin entitled "Method of Connecting a Conductive Trace to a Semiconductor Chip," U.S. Application Serial No. 09/939,140 filed August 24, 2001 (now U.S. Patent No. 6,576,539) by Charles W.C. Lin entitled "Semiconductor Chip Assembly with Interlocked Conductive Trace," and U.S. Application Serial No. 09/962,754 filed September 24, 2001 (now U.S. Patent No. 6,673,710) by Charles W.C. Lin entitled "Method of Connecting a Conductive Trace and an Insulative Base to a Semiconductor Chip," each of which is incorporated by reference. Conventional wire bonding, TAB and flip-chip techniques can also be employed. With conventional wire bonding, TAB and flip-chip techniques, the connection joints between the conductive traces and the pads can be formed before the encapsulant is formed.

Replace the paragraph at page 42, lines 20-29 with the following paragraph:

The terminals can have a wide variety of shapes and sizes and can be formed by a wide variety of techniques. See, for instance, U.S. Application Serial No. 09/972,796 filed October 6, 2001 (now U.S. Patent No. 6,667,229) by Charles W.C. Lin et al. entitled "Method of Connecting a Bumped Compliant Conductive Trace and an Insulative Base to a Semiconductor Chip," and U.S. Application Serial No. 09/997,973 filed November 29, 2001 (now U.S. Patent No. 6,492,252) by Charles W.C. Lin et al. entitled "Method of Connecting a Bumped Conductive Trace to a Semiconductor Chip," each of which is incorporated by reference. The terminals can be integral with or attached to the routing lines. For instance, the terminals can be solder balls deposited on planar routing lines. The terminals may include or exclude cavities, and can resemble columns, pillars, pins, bumps, balls, spheres, hemispheres or other shapes.